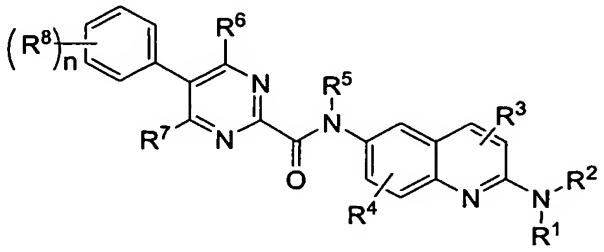
CLAIMS

1. 2-Aminoquinoline derivatives represented by a general formula [I]



[I]

[in which R^1 and R^2 each independently stands for a substituent selected from the group consisting of

1) optionally hydroxyl- or halogen-substituted lower alkyl,
2) optionally R^9-substituted 3 to 6-membered cycloalkyl, and
3) optionally R^9-substituted 4 to 6-membered heterocycloalkyl,

or

4) R^1 and R^2 together form a 4 to 11-membered crosslinking, non-crosslinking or spiro ring aliphatic nitrogen-containing heterocycle, with the nitrogen atom to which they bind, one or two optional hydrogen atoms in the aliphatic nitrogen-containing heterocycle being optionally substituted with R^9;

R^3, R^4, R^6 and R^7 each independently stands for a substituent selected from the group consisting of

1) hydrogen,
2) hydroxyl,
3) halogen and
4) optionally halogen-substituted lower alkyl;

R^5 stands for

1) hydrogen or
2) optionally halogen-substituted lower alkyl;

R^8 each independently stands for a substituent selected from the group consisting of

1) halogen,
2) lower alkyl and
3) lower alkyloxy;

R^9 stands for a substituent selected from the group consisting of hydroxyl, amino, mono-lower alkylamino, di-lower alkylamino, optionally hydroxyl- or halogen-substituted lower alkyl, (lower alkyloxycarbonyl)amino, lower alkyloxycarbonyl- (lower alkyl)amino, lower

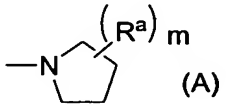
alkylcarbonylamino, lower alkylcarbonyl(lower alkyl)amino, mono-lower alkylcarbamoyl-(lower alkyl)amino, di-lower alkylcarbamoyl(lower alkyl)amino, lower alkylsulfonylamino, lower alkylsulfonyl(lower alkyl)amino, oxo and 2-oxopyrrolidinyl; and

n is 0, 1, 2, 3 or 4]

or their pharmaceutically acceptable salts.

2. The compounds as set forth in Claim 1, in which R^1 is lower alkyl, and R^2 is selected from the group consisting of optionally hydroxyl-substituted lower alkyl, tetrahydrofuranyl and optionally R^9-substituted pyrrolidinyl, or their pharmaceutically acceptable salts.

3. The compounds as set forth in Claim 1, in which the 4 to 11-membered crosslinking, non-crosslinking or spiro ring aliphatic nitrogen-containing heterocycle formed by R^1 and R^2 together with the nitrogen atom to which they bind is represented by a formula (A)

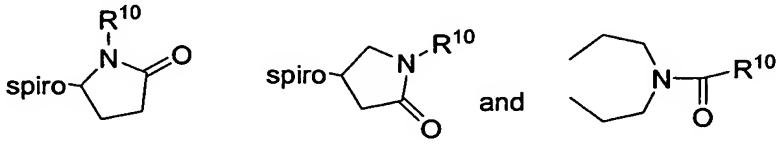


(A)

[in which R^a either stands for R^9 or two R^as together form $-(CH_2)x-(NH)-(CH_2)y-$, optional hydrogen in the substituent group may optionally be substituted with lower alkyl, lower alkylcarbonyl or oxo, x and y each independently stands for 0, 1, 2, 3 or 4 while satisfying the range specified by $3 \leqq x + y \leqq 4$, and m stands for 0, 1 or 2] or their pharmaceutically acceptable salts.

4. The compounds as set forth in Claim 3, in which R^a is selected from the group consisting of lower alkylcarbonyl(lower alkyl)amino, lower alkylsulfonyl(lower alkyl)amino, lower alkyloxycarbonyl(lower alkyl)amino and di-lower alkylcarbamoyl(lower alkyl)amino and m=1 or their pharmaceutically acceptable salts.

5. The compounds as set forth in Claim 3 in which m=2, wherein the two R^as together form a group selected from the group consisting of



[wherein R^{10} stands for lower alkyl or lower alkylcarbonyl]

or their pharmaceutically acceptable salts.

6. The compounds as set forth in Claim 3 in which the aliphatic nitrogen-containing heterocycle represented by the formula [A] is selected from the group consisting of 1-methyl-2-oxo-1,7-diazaspiro[4.4]nonan-7-yl, 7-methyl-8-oxo-2,7-diazaspiro[4.4]nonan-2-yl, 3-[acetyl(methyl)amino]pyrrolidin-1-yl, 3-[propionyl(methyl)amino]pyrrolidin-1-yl, 3-[isobutyryl(methyl)-amino]pyrrolidin-1-yl, 3-[methanesulfonyl(methyl)amino]pyrrolidin-1-yl, 3-[methoxycarbonyl(methyl)amino]pyrrolidin-1-yl, 3-{[(dimethylamino)carbonyl](methyl)amino}pyrrolidin-1-yl, 6-acetyldecahydropyrrolo[3,4-d]azepin-2-yl and 2-oxo[1.3']bipyrrolidinyl-1'-yl or their pharmaceutically acceptable salts.

7. The compounds as set forth in Claim 1, in which R^8 is fluorine atom or methoxy group, or their pharmaceutically acceptable salts.

8. The compounds as set forth in Claim 1 in which the compound represented by the general formula [I] is selected from the group consisting of:

- 5-(4-fluorophenyl)-N-[2-(1-methyl-2-oxo-1,7-diazaspiro[4,4]nonan-7-yl)-6-quinolinyl]-2-pyrimidinecarboxamide,
- 5-(4-fluorophenyl)-N-[2-(7-methyl-8-oxo-2,7-diazaspiro[4,4]-nonan-2-yl)-6-quinolinyl]-2-pyrimidinecarboxamide,
- N-(2-[(3R)-3-[isobutyryl(methyl)amino]-1-pyrrolidinyl]-6- quinolinyl)-5-phenyl-2-pyrimidinecarboxamide,
- N-[2-(6-acetyldecahydropyrrolo[3,4-d]azepin-2-yl)-6- quinolinyl]-5-phenyl-2-pyrimidinecarboxamide,
- N-[2-[(3R)-3-[acetyl(methyl)amino]-1-pyrrolidinyl]-6-quinolinyl)-5-phenyl-2-pyrimidinecarboxamide,
- 5-phenyl-N-(2-[(3R)-3-[propionyl(methyl)amino]-1- pyrrolidinyl]-6-quinolinyl)-2-pyrimidinecarboxamide,
- N-(2-[(3R)-3-[methanesulfonyl(methyl)amino]-1-pyrrolidinyl]-6-quinolinyl)-5-phenyl-2-pyrimidinecarboxamide,
- N-(2-[(3R)-3-[methoxycarbonyl(methyl)amino-1- pyrrolidinyl]-6-quinolinyl)-5-phenyl-2-pyrimidinecarboxamide,
- N-(2-[(3R)-3-[[(dimethylamino)carbonyl)](methyl)amino]-1-pyrrolidinyl]-6-quinolinyl)-5-phenyl-2-pyrimidinecarboxamide,
- N-(2-[isopropyl(methyl)amino]-6-quinolinyl)-5-phenyl-2-pyrimidinecarboxamide,
- 5-(4-fluorophenyl)-N-(2-[(3R)-3-[isobutyryl(methyl)amino]-1-pyrrolidinyl]-6-quinolinyl)-2-pyrimidinecarboxamide,

• N-(2-[(3R)-3-[acetyl(methyl)amino]-1-pyrrolidinyl]-6-quinolinyl)-5-(4-fluorophenyl)-2-pyrimidinecarboxamide,

• 5-(4-fluorophenyl)-N-(2-[methyl(tetrahydro-3-furanyl)amino]-6-quinolinyl)-2-pyrimidinecarboxamide and

• 5-(3-fluorophenyl)-N-(2-[(3R)-3-[isobutyryl(methyl)amino]-1-pyrrolidinyl]-6-quinolinyl)-2-pyrimidinecarboxamide,

or their pharmaceutically acceptable salts.

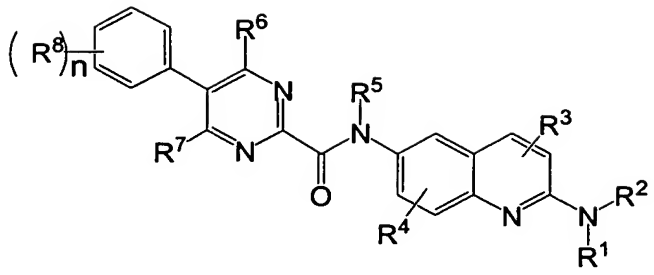
9. Melanin concentrating hormone receptor antagonists containing the compounds as set forth in Claims 1 – 8 as the active ingredient.

10. Preventing or treating agents which contain the compounds as set forth in Claims 1 – 8 as the active ingredient, of metabolic disorders represented by obesity, diabetes, hormone disorder, hyperlipidemia, gout, fatty liver, hepatitis and cirrhosis; cardiovascular disorders, represented by stenocardia, acute or congestive heart failure, myocardial infarction , coronary atherosclerosis, hypertension, renal diseases and electrolyte abnormality; central nervous system or peripheral nervous system disorders represented by bulimia, emotional disturbance, depression, anxiety, epilepsy, delirium, dementia, schizophrenia, attention-deficit hyperactivity disorder, memory impairment, sleep disorders, cognitive failure, dyskinesia, paresthesias, smell disorders, morphine tolerance, drug dependence and alcoholism; reproductive disorders represented by infertility, preterm labor and sexual dysfunction; digestive disorders; respiratory disorders; cancer or pigmentation.

11. Preventing or treating agents as set forth in Claim 10, which are preventing or treating agents for obesity.

12. Medical compositions which contain the compounds as set forth in Claims 1 – 8 or their pharmaceutically acceptable salts, and pharmaceutically acceptable carriers.

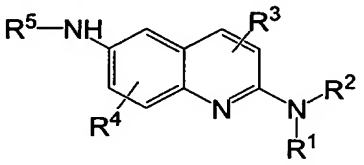
13. A process for preparing the compounds represented by the general formula [I]



[I]

[in which R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8 and n have the same significations as given in Claim 1],

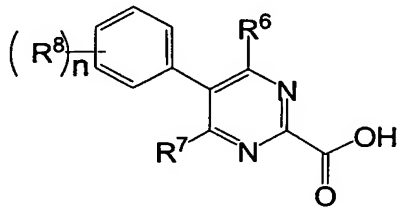
which comprises a step of subjecting a compound of a general formula [II]



[II]

[in which R^1, R^2, R^3, R^4 and R^5 have the same significations as given in Claim 1]

and a compound of a general formula [III]



[III]

[in which R^6, R^7, R^8 and n have the same significations as given in Claim 1]

to an amidation reaction.